

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of the Claims:**

Claim 1 (currently amended): An inverted microscope having a U-shaped microscope housing (1), on one limb (2) whereof is provided a housing attachment surface (3) for attachment of a module, wherein said housing attachment surface (3) is parallel to the base of said inverted microscope; and,

wherein said module (4) comprises a horizontally protruding base unit (5) having a horizontal upper surface and ~~on the one hand~~ a binocular tube (6) ~~placed thereon~~, and ~~on the other hand~~ a photo tube (7) individually attached to said horizontal upper surface, with a photo device (8)[[.]] ~~placed thereon~~ on said photo tube (7) and wherein said binocular tube (6) and said photo tube (7) are mutually exclusive and extend above said housing attachment surface (3) when said module (4) is removably attached to said housing attachment surface (3), and wherein from the position of the binocular tube (6) an unimpeded view of the specimen is permitted.

Claim 2 (previously presented): The inverted microscope as defined in Claim 1, wherein the module (4) is embodied as a one-piece combination module (4; 5, 6, 7) and has on its underside a module attachment apparatus (9) that is configured to be removably attached to the housing attachment surface (3).

Claim 3 (previously presented): The inverted microscope as defined in Claim 1, wherein the vertical optical axis (10) of the observation beam bundle, extending in the one limb (2), penetrates through a first optical deflection element (11) after entering the base unit (5), and then passes through a first tube lens (12) arranged in the binocular tube (6), while the photo beam (13)

deflected at the optical deflection element (11), after passage through a second tube lens (14) and after deflection at a second optical deflection element (15), enters the photo tube (7) with attached photo device (8).

Claim 4 (previously presented): The inverted microscope as defined in Claim 1, further comprising an optical deflection element (11) in said module and wherein the optical deflection element (11) can be selectably brought into or out of the working position.

Claim 5 (previously presented): The inverted microscope as defined in Claim 1, wherein an infinity beam exists in the region of an attachment surface (9a) of the module attachment apparatus (9).

Claim 6 (previously presented): The inverted microscope as defined in Claim 1, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 7 (original): The inverted microscope as defined in Claim 6, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 8 (previously presented): The inverted microscope as defined in Claim 2, wherein the vertical optical axis (10) of the observation beam bundle, extending in the one limb (2), penetrates through a first optical deflection element (11) after entering the base unit (5), and then passes through a first tube lens (12) arranged in the binocular tube (6), while the photo beam (13) deflected at the optical deflection element (11), after passage through a second tube lens (14) and after deflection at a second optical deflection element (15), enters the photo tube (7) with attached photo device (8).

Claim 9 (previously presented): The inverted microscope as defined in Claim 3, wherein the optical deflection element (11) can be selectably brought into or out of the working position.

Claim 10 (previously presented): The inverted microscope as defined in Claim 8, wherein the optical deflection element (11) can be selectably brought into or out of the working position.

Claim 11 (previously presented): The inverted microscope as defined in Claim 8, wherein the optical deflection element (11) can be selectably brought into or out of the working position.

Claim 12 (previously presented): The inverted microscope as defined in Claim 2, wherein an infinity beam exists in the region of an attachment surface (9a) of the module attachment apparatus (9).

Claim 13 (previously presented): The inverted microscope as defined in Claim 3, wherein an infinity beam exists in the region of an attachment surface (9a) of the module attachment apparatus (9).

Claim 14 (previously presented): The inverted microscope as defined in Claim 4, wherein an infinity beam exists in the region of an attachment surface (9a) of the module attachment apparatus (9).

Claim 15 (previously presented): The inverted microscope as defined in Claim 8, wherein an infinity beam exists in the region of an attachment surface (9a) of the module attachment apparatus (9).

Claim 16 (previously presented): The inverted microscope as defined in Claim 9, wherein an infinity beam exists in the region of an attachment surface (9a) of the module attachment apparatus (9).

Claim 17 (previously presented): The inverted microscope as defined in Claim 10, wherein an infinity beam exists in the region of an attachment surface (9a) of the module attachment apparatus (9).

Claim 18 (previously presented): The inverted microscope as defined in Claim 11, wherein an infinity beam exists in the region of an attachment surface (9a) of the module attachment apparatus (9).

Claim 19 (previously presented): The inverted microscope as defined in Claim 2, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 20 (previously presented): The inverted microscope as defined in Claim 3, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 21 (previously presented): The inverted microscope as defined in Claim 4, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 22 (previously presented): The inverted microscope as defined in Claim 5, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 23 (previously presented): The inverted microscope as defined in Claim 8, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 24 (previously presented): The inverted microscope as defined in Claim 9, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 25 (previously presented): The inverted microscope as defined in Claim 10, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 26 (previously presented): The inverted microscope as defined in Claim 11, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 27 (previously presented): The inverted microscope as defined in Claim 12, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 28 (previously presented): The inverted microscope as defined in Claim 13, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 29 (previously presented): The inverted microscope as defined in Claim 14, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 30 (previously presented): The inverted microscope as defined in Claim 15, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 31 (previously presented): The inverted microscope as defined in Claim 16, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 32 (previously presented): The inverted microscope as defined in Claim 17, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 33 (previously presented): The inverted microscope as defined in Claim 18, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 34 (previously presented): The inverted microscope as defined in Claim 19, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 35 (previously presented): The inverted microscope as defined in Claim 20, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 36 (previously presented): The inverted microscope as defined in Claim 21, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 37 (previously presented): The inverted microscope as defined in Claim 22, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 38 (previously presented): The inverted microscope as defined in Claim 23, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 39 (previously presented): The inverted microscope as defined in Claim 24, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 40 (previously presented): The inverted microscope as defined in Claim 25, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 41 (previously presented): The inverted microscope as defined in Claim 26, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 42 (previously presented): The inverted microscope as defined in Claim 27, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 43 (previously presented): The inverted microscope as defined in Claim 28, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 44 (previously presented): The inverted microscope as defined in Claim 29, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 45 (previously presented): The inverted microscope as defined in Claim 30, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 46 (previously presented): The inverted microscope as defined in Claim 31, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 47 (previously presented): The inverted microscope as defined in Claim 32, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 48 (previously presented): The inverted microscope as defined in Claim 33, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 49 (previously presented): The inverted microscope as defined in Claim 3 wherein said passage through a second tube is parallel to said attachment surface.

Claim 50 (previously presented): The inverted microscope as defined in Claim 8 wherein said passage through a second tube is parallel to said attachment surface.



Claim 51 (new):       An inverted microscope comprising:

        a U-shaped microscope housing (1), on one limb (2) whereof is provided a housing attachment surface (3) for removable attachment of a module, wherein said housing attachment surface (3) is parallel to the base of said inverted microscope, said module (4) comprises a protruding base unit (5) having a horizontal upper surface and a binocular tube (6) and a photo tube (7) individually attached to said horizontal upper surface, with a photo device (8) placed on said photo tube (7) and wherein said binocular tube (6) and said photo tube (7) are mutually exclusive and extend above said housing attachment surface (3) when said module (4) is removably attached to said housing attachment surface (3) and wherein from the position of the binocular tube (6) an unimpeded view of the specimen is permitted;

        said module (4) further comprising a movable optical deflection element (11), said photo tube (7) in front of said movable optical deflection element and said binocular tube (6) behind said movable optical deflection element (11), and wherein said movable optical deflection element (11) reflects at least a portion of a light beam entering said module (4) into said photo tube (7) when said movable optical deflection element (11) is in a working position and said light beam entering said binocular tube (6) is substantially parallel to said at least a portion of said light beam entering said photo tube (7).